D1L103 QUENCH SUMMARY

Magcool Bay E

QUENCH	RUN	CURRENT	T(in)	T(out)	START	MIITS	COIL	COMMENTS
#	#	(A)	(K)	(K)	(ms)			

T = 4.5K (nom)

Bore tube sealed and evacuated (warm bore tube with spacers and insulation added)

(a)	upper	11.0	-51	4.618	4.549	6363	10	1
	lower	9.8	-38	4.633	4.538	6981	11	2
	lower	9.5	-42	4.668	4.574	6673	12	3
	lower	9.5	-40	4.599	4.519	6776	13	4

warm bore tube open with heater operating

repeated cycles to 5900A (10,40,60A/s) then 6500A (40,60A/s) for field measurements --- no quenches

5 53 6844 4.507 4.596 -37 9.4 lower

Notes:

a) Ramp rate for quenches was 20A/s. For quench 1, the magnet stopped at 5500A for 1 min before continuing the ramp at 20A/s.

b) There was a 1 hour or more wait between quenches.

c) The temperature sensors recorded are diode sensors T9 at the helium input and T8 at the output. Both have associated redundant sensors.

d) There were no auxiliary voltage taps in the magnet coils.

e) Data acquisition sampling rate was 1kHz for all quenches.

f) Strip heaters were fired at 100V (nom) and 108ms.